## **Healthcare Twitter Analytics**

## Have a look at the relationships among the numerical fields

```
file = 'Tweets_Celiac_sent.csv'
data = read.csv(file)
data=data[c("id", "score", "retweet_count", "listed_count", "favourites_count", "sentiment")]
first.look(data[c(-1)])
```

```
## ---- str: look at data types and values -----
## 'data.frame': 5675 obs. of 5 variables:
## $ score
                   : num 7.73 6.84 6.88 6.86 8.4 ...
## $ retweet count : int 10 0 0 0 2 1 0 0 2 4 ...
## $ listed count : int 142 5 5 5 27 71 71 13 59 223 ...
   $ favourites count: int 55 0 0 0 93 0 0 482 62 55 ...
   $ sentiment : num 0 0 5 0 3 2 3 3 3 0 ...
## NULL
##
## ---- sample size: 5675
## ---- sample size of complete cases: 5675
## ---- difference: 0
##
## ---- names: variable names
## [1] "score"
                       "retweet count" "listed count"
## [4] "favourites count" "sentiment"
##
## ---- some: Randomly select a few elements
       score retweet count listed count favourites count sentiment
## 194 6.841
                         5
                                     2
                                                  1206
## 1140 8.009
                                    29
                                                    43
                                                               4
## 2378 6.840
                                    28
                                                   638
## 3030 7.319
                                                    19
## 3086 6.713
                                    59
                                                    62
## 4014 7.737
                                    1
                                                    97
## 4834 8.277
                                    43
                                                 1868
                                                              -1
## 4842 10.840
                         1
                                    608
                                                   280
                                                               3
## 5141 7.231
                                     4
                                                     2
                                                               Ω
## 5552 7.284
                                     7
                                                    55
                                                               Λ
##
## ---- summary: statistics for each variable
       score retweet count listed_count favourites_count
  Min. : 6.22 Min. : 0.00 Min. : 0 Min. :
  1st Qu.: 6.97   1st Qu.: 0.00   1st Qu.:
                                               1st Qu.:
```

```
Median: 7.33 Median: 0.00 Median:
##
                                           16
                                                Median :
                                                            228
##
  Mean : 8.02 Mean : 1.78 Mean : 80
                                                 Mean : 1377
##
   3rd Qu.: 8.50 3rd Qu.: 2.00 3rd Qu.: 59
                                                3rd Qu.:
                                                            998
##
   Max. :13.91
                  Max. :40.00 Max. :30761 Max. :108340
##
     sentiment
##
   Min. :-9.00
   1st Qu.: 0.00
##
##
  Median : 0.00
  Mean : 1.21
##
   3rd Qu.: 2.00
##
   Max. :16.00
##
##
## ---- grfsummary: statistics for each quantitative variable
             score retweet count listed count favourites count sentiment
##
                        5675.00
                                     5675.00
                                                     5675.00
## n
           5675.00
                                                               5675.00
## nNA
             0.00
                           0.00
                                       0.00
                                                        0.00
                                                                 0.00
## min
             6.22
                           0.00
                                      0.00
                                                        0.00
                                                                -9.00
## mean
             8.02
                           1.78
                                      79.68
                                                     1376.79
                                                                 1.21
## median
                           0.00
             7.33
                                      16.00
                                                     228.00
                                                                 0.00
## stdev
             1.55
                           4.09
                                      627.11
                                                    5633.75
                                                                 2.34
## skew
             1.33
                           4.65
                                      42.81
                                                      13.79
                                                                 0.86
## npskew
             0.44
                                        0.10
                                                        0.20
                                                                 0.52
                           0.43
## kurtosis
             0.61
                          27.33
                                    2036.84
                                                                 2.05
                                                      240.79
                                                   108340.00
## max
             13.92
                          40.00
                                    30761.00
                                                                16.00
##
##
   ----- possible factor non-independence -----
## factor variable names:
```

## List of possible factor pairs with interactions:

